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ORIGINAL ARTICLE

Informal and Formal Long-term Care for Frail Older Adults in Cairo, Egypt: Family Caregiving Decisions in a Context of Social Change

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Abstract This paper explores the factors that lead family caregivers to place their frail older relatives into long-term care centers in Cairo, Egypt despite norms of family care. Semi-structured interviews were conducted with 18 "case" caregivers who placed their older relatives into long-term care and 17 "control" caregivers who provided for their older relatives at home. Cases and controls differed in their relationship to the older adult, number and proximity of supportive siblings, and perceived health status of the older adult. Caregivers who used long-term care justified their decision by stressing the need for relief from the burden of caregiving, and by conceiving long-term care as part of a broadened definition of family care. Egyptians are devising new strategies of care despite persistent norms of reciprocity among kin. As demographic, epidemiologic, and socioeconomic changes continue, families may adopt new combinations of care to support their frail older relatives. Findings underscore the need for population-based research about strategies of caring for frail older relatives in this context.

Keywords Adaptive strategies · Intergenerational support · Social change · Egypt

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Introduction

In Cairo, Egypt, population aging is occurring in a context of socioeconomic change, including changes in family structure and intergenerational support. Public infrastructures in Cairo, and throughout much of the Middle East, are ill-equipped to care for older people's needs. This gap in care exists because policy makers still assume that families will care for their older relatives, despite increasing rates of migration, urbanization, and women's participation in the workforce (Sibai *et al.* 2004; Nandakumar *et al.* 1998). In Egypt, family care of older relatives is the norm, yet extended hospitalizations and the institutionalization of frail, older adults have occurred in greater-Cairo since the 1980s (Rugh 1984). Population-based rates of institutionalization are uncertain, however, because the provision of such care often is informal and poorly documented (Margolis and Reed 2001; Boggatz and Dassen 2005). Still, its emergence provokes questions about the motivations of families to place their frail older relatives into long-term care when expectations for home-based care persist. Although other research in the USA has explored the characteristics of caregivers and receivers that are associated with institutionalization (e.g., McFall and Miller 1992; Dwyer *et al.* 1994; Yaffe *et al.* 2002), the applicability of this research to Egypt is unclear.

Social exchange theory and the care of frail older Caireans

Social exchange theorists argue that social relationships are characterized by exchanges involving dynamics of power and equity (Cook and Emerson 1978), and that people engage in ongoing, mutually dependent exchanges with specific partners over time (Call *et al.* 1999). In Egypt, a system of obligations (*wagib*) forms the basis of social interactions within the immediate and extended family, and, ideally, this system ensures that the needs of individuals within Egyptian families are met (Rugh 1984; Rashad *et al.* 2005). Public support for older adults is limited in Egypt, and families are the main, if not only, source of old-age support (Yount and Agree 2004; Boggatz and Dassen 2005). The absence of a public safety net for frail older adults underscores the importance of intergenerational support across the family life cycle. Filial obligation is part of this system of exchange, as parental investments obligate children to reciprocate with financial and affective support when the children become adults and their parents become frail (Omran and Roudi 1993; Yount 2005a; Yount and Khadr 2008). Understanding how broader social changes in Egypt may influence these exchanges is useful to understand adaptations in the strategies of younger caregivers to support their older relatives.

Demographic transitions and care dependency in Egypt

Between 1977 and 2007 in Egypt, the total fertility rate decreased from 6.1 children per woman to 2.8 children per woman (US Census Bureau 2006a, b). Life expectancy at birth also increased in Egypt from 62 in 1993 to 67 years in 2003 (World Health Organization [WHO] 1993, 2004). As a result of these changes, adults over the age of 60 have become the fastest growing segment of the Egyptian population (Boggatz and Dassen 2005). Between 2000 and 2030, for example, the percentage of the Egyptian population aged 65 years or older is projected to increase from 4% to 8.7%, and the percentage aged 80 years or older should increase from 0.4% to 1.4% (US Census Bureau 2006a ,b).

Concurrent with an aging population is the potential for an increase in care dependency. Nandakumar *et al.* (1998) found that 9% of Egyptians over the age of 50 had difficulty with

at least one activity of daily living (ADL; bathing, dressing, feeding, transferring, toileting, and walking), and other studies have identified high rates of physical functional and cognitive impairment among older Egyptians (Yount and Agree 2005; Yount 2007). According to these studies, the proportion of adults with ADL limitations also increases significantly with age, and researchers have noted that difficulty with ADLs often signals the need for some form of supplementary care (Nandakumar *et al.* 1998; Yount and Agree 2005). With the above-noted shifts in the population structure, families increasingly include longer-lived, disabled adults who have special needs for care and fewer adult children to provide such care.

Family life and socioeconomic changes in Egypt relating to elder care

Dramatic socioeconomic changes in Egypt during the past 30 years may be associated with important changes in family life (Nawar *et al.* 1994). Examples include more frequent nuclear living in response to internal and international labor migration (Omran and Roudi 1993; Nandakumar *et al.* 1998), as well as delays in marriage (Singerman and Ibrahim 2001; Rashad *et al.* 2005). The changing place of women in society also has fostered shifts in marital and intergenerational power (Yount and Agree 2004; Yount 2005b), and these shifts have implications for the care of older adults. Among other factors, economic need and growing desires for commercial goods have pushed more women into the formal work force (MacLeod 1996; Asdar 1998; Nandakumar *et al.* 1998). Women also have begun to marry at later ages (Rashad *et al.* 2005), to exert more say in the selection of their spouse, and to achieve higher levels of schooling (El-Zanaty *et al.* 1996; Asdar 1998; El-Zanaty and Way 2001; Boggatz and Dassen 2005). These competing demands may motivate some young adults to find new ways to care for their older relatives.

In the context of these other changes, it is difficult to find reliable estimates for the number of long-term care facilities in Egypt. The few available sources indicate a trend toward an increasing, yet still limited, number of geriatric institutions located largely in urban areas (Boggatz and Dassen 2005; Gadallah 2002; Nandakumar *et al.* 1998). The level of care and the quality of services provided can vary markedly across these facilities (Boggatz and Dassen 2005).

The purpose of this paper is to explore the factors that lead family caregivers to place their frail older relatives into one long-term care center located in Cairo, Egypt.

Subjects and Methods

This study was conducted in the Department of Geriatrics of Palestine Hospital (hereafter called "the Department"), which was established in 1994 in a private facility of the Palestinian Red Crescent Society. Although a limited number of other geriatric facilities exist in Egypt, the Department studied here is the first long-term care center that is housed in a hospital with trained medical staff who are available on a 24-h basis. The Department has 16 residential rooms and can accommodate as many as 30 inpatients. Patients are entered into the long-term care unit for both long-term residence and temporary acute care, with flexibility to change short-term or long-term status.

During June–August 2003, December 2003, and January 2004, members of the research team interviewed 18 case-caregivers and 17 control-caregivers of "frail older relatives." A "frail older relative" was a person who was reported by his or her caregiver to be physically and/or cognitively impaired and thus needing help with ADLs. "Cases" included adult

caregivers who had each placed a frail older relative into the long-term care center of the Department, and who were identified through admission records at Palestine Hospital. Because of the high cost of private long-term care in the Department, cases were generally from middle- and upper-class backgrounds. "Controls" included 17 caregivers who each provided for an older relative in the caregiver's home in Cairo. Convenience sampling was used to identify and to recruit control caregivers. Eligible controls were limited to Caireans from the middle- and upper-classes to ensure that the socioeconomic backgrounds of cases and controls were similar. Class status was confirmed by reported level of schooling and income during the structured portion of the interview. Almost all cases and controls had at least a university education and an income over $167 per month (which exceeded the average monthly income of $127 in 2000/2001; World Bank 2004). No monetary or other tangible incentives were offered for participation in the research. The consent form was translated into Egyptian Colloquial Arabic, and informed consent was obtained from all participants.

A semi-structured qualitative form was the primary data collection instrument and guided interviews with cases and controls. A short quantitative survey also gathered data immediately prior to the semi-structured interview (both instruments available upon request). The quantitative and qualitative guides were translated into Egyptian Colloquial Arabic and were checked by a native Arabic speaking geriatrician. This process ensured that the questions were consistent with the English original and relevant to the setting of urban Cairo. The structured survey focused on demographic information and was adapted in part from a questionnaire that was used in a study of older adults in Ismailia, Egypt.[1] Topics covered by the semi-structured interview guide related to family dynamics, decision processes, expectations for care, and perceptions of care-giving strategies in Cairo. The qualitative format of the interviews allowed the informants to share their personal stories about how and why they made certain care-giving decisions for their older relatives, and to share opinions about general strategies used in caring for older relatives in the context of contemporary Cairo.

One third of the interviews were conducted in Arabic by a geriatric physician who was trained in the objectives of the study, interview techniques, active listening, and probing. Completion of the interview in English or Arabic was based on the respondent's language ability and preference. All of the interviews were conducted in a private room in Palestine Hospital or in the informants' homes as per their preference. Interviews that were conducted in Arabic were subsequently translated into English and transcribed. Interviews that were conducted in English were transcribed, and all transcribed interviews were saved as computerized text files.

Data quality was assured and assessed in three phases of the research project. First, a rigorous process of instrument development helped to ensure the validity and reliability of the data collected. This process entailed a review of the literature about care-giving in the USA and the Middle East, advice from senior qualitative and Egyptian researchers about instrument form and content, a pilot test, and revisions to drafts of the instruments for clarity and contextual appropriateness based on this review, advice, and field testing. Second, interviewers received extensive training to ensure the reliability of the data collected. This training included techniques for active listening, probing, consistent administration of the study instruments, and creating rapport and trust with the respondent. Third, a rigorous process of data cleaning and management helped to ensure the quality of the data that were analyzed. This process involved audio recording and detailed note-taking

[1] Yount, Kathryn (Principal Investigator) "Cross-Cultural Measurement of Gender Differences in Disability and Care." Grant 1 RO3 AG21707-01, funded by National Institute on Aging, September 2002.

during all interviews. All interviews then were transcribed and inspected for completeness and internal consistency. The research team discussed all notable inconsistencies and, in rare cases, decided to exclude parts of the data from analysis.

The responses to all structured questions were entered into Epi Info 6, and relative frequency distributions of sociodemographic variables were tabulated separately for case and control caregivers. Because the numbers of cases and controls were small, tests of significance for differences in the distributions of variables across groups were not computed. Large differences in these distributions are discussed, however, and caution in the interpretation of observed differences is warranted.

Text files were entered into N6, a qualitative data analysis software program (QSR International 2002). Qualitative data were analyzed using content analysis, as described by Patton (1990). During the fieldwork, transcripts were read repeatedly for familiarity with the data and the initial identification of key concepts and themes. After the data collection was completed, all of the textual data were reviewed systematically to create a final set of codes and to identify salient concepts. The transcripts were coded, and the coded text was organized according to key themes and contextual factors relevant to the decision of how to care for older relatives. Themes that were explored in detail were those that emerged from both the qualitative and quantitative data.

Results

Quantitative findings

Cases and controls were similar in most background characteristics. Women comprised over 60% of the caregivers among cases and controls (Table 1). On average, cases and controls were 57 and 53 years old, respectively. Over 80% of cases and controls were married, almost 90% had living children, and all had living siblings. Over three-quarters of cases and controls had attained at least a university education. At least one half of each group was employed in positions that required a high level of education, and the remaining half of each group was unemployed. Some of the unemployed were mothers who were caring for school-aged children, and others were older and no longer economically active.

Although many of the sociodemographic characteristics of cases and controls were similar, certain differences between the two groups may in part account for their divergent strategies of caring for their older relatives. Three differences are especially notable: their relationship to the frail older person, the number and proximity of their siblings, and their perceptions about the health status of the older relative. Regarding the familial relationship of caregivers to the frail older adult, 94% of controls, compared to 67% of cases, were an adult child or spouse of a frail older adult (Table 1). Fully 33% of cases were not "immediate family" (e.g. child or spouse) of a frail older adult, including a brother, daughter-in-law, or grandchild (granddaughter in particular).

Another difference between cases and controls was the number and proximity of relevant, surviving siblings. If the main caregiver was a child of the older adult, the adult child reported the number of his or her living siblings. If the main caregiver was the wife of the older adult, the wife reported the number of her *husband's* siblings, because a sibling of the wife is less obligated to provide care than is a sibling of the older adult. All non-adult–child caregivers received similar questions. As shown in Table 1, the average number of immediate brothers is similar for cases and controls (1.1 vs. 1.3); however, controls have more immediate sisters than do cases, on average (1.6 vs. 1.0).

Table 1 Characteristics of 'Case' and 'Control' Caregivers of Frail Older Relatives, Cairo, Egypt (n=35)

	Case (n=18)	Control (n=17)
Average age in years (range)	57.2 (36–80)	53.2 (40–67)
Relation to the frail older adult (%)		
Wife	16.7	5.9
Daughter	33.3	52.9
Son	16.7	35.3
Daughter-in-law	5.6	5.9
Brother	22.2	0.0
Granddaughter	5.6	0.0
Marital status (%)		
Single	5.6	0.0
Married	94.4	82.4
Divorced	0.0	5.9
Widowed	0.0	11.8
Has living children (%) (reference: no)	88.9	94.1
Has living siblings (%) (reference: no)	100.0	100.0
Average number of living sisters (n)	1.0	1.6
Average number of living brothers (n)	1.1	1.3
Educational status (%)		
Preparatory	11.1	0.0
Secondary	11.1	5.9
University	50.0	41.2
More than university	27.8	52.9
Employment status (%)		
Job requires high education	50.0	64.7
Job requires some education	5.6	0.0
Not employed	44.4	35.3
Perceived physical health of older relative (%)		
Excellent	5.6	0.0
Very good	0.0	5.9
Good	5.6	17.6
Fair	27.8	35.3
Poor	50.0	29.4
Very poor	11.1	11.8
Perceived mental health of older relative (%)		
Excellent	11.1	29.4
Very good	5.6	5.9
Good	16.7	5.9
Fair	11.1	17.6
Poor	16.7	35.3
Very poor	38.9	5.9
Older relative admitted into the Department after an acute attack of illness (%)	28.0	N/A

The "immediate siblings" of control caregivers also lived in closer geographic proximity (see Table 2). Although over 75% of cases and controls had an immediate sibling living in greater Cairo, living in the same or a nearby neighborhood is important in a city that covers 214 km^2 and that houses over 16 million people (CAPMAS 2003). Almost 57% of controls, compared to only 21% of cases, had siblings who lived with them or in the same neighborhood.

Table 2 Location of Living Siblings of 'Case' and 'Control' Caregivers, Cairo, Egypt (n=87)

	Case (n=34)	Control (n=53)
Coresident (%)	0.0	1.9
Same neighborhood (%)	20.6	54.7
In Cairo, but a different neighborhood (%)	55.9	24.5
Another city in Egypt (%)	5.9	1.9
Another country (%)	17.6	17.0

A third difference between cases and controls was their perceptions of the physical and mental health of their older relatives (Table 1). Notably, data on the mental and physical health of the older relatives of cases were based on caregivers' reports. The accuracy of such reports was confirmed through departmental records and was found to be consistent. Similar data for the older relatives of controls were based on caregivers' reports without confirmation through medical records, as such records were not available to the research staff. Thus, differences in health between the older relatives of cases and controls could be a result of discrepancies between perceived and objective measures of health. A caregiver's perceptions of an older person's needs are important, however, because perceived needs may exceed the caregiver's felt capacity to provide care (Call *et al.* 1999).

As expected, 61% of cases compared to 41% of controls perceived that their older relatives' physical health was poor or very poor, and a notable gap was apparent in the percentages of caregivers reporting poor or very poor mental health of the older adult (56% of case vs. 41% of controls). Twenty-eight percent of cases admitted their older relative into the Department after an acute attack of illness (Table 1).

Qualitative findings

Differences between cases and controls in their relationship to their frail older relative, their siblings' characteristics, and their perceptions about the health status of their older relative, found in the quantitative data were mirrored in the qualitative findings.

In Egypt, caring for a frail older relative is a duty (*wagib*), but this duty is not shared equally among all family members. Local norms place special caregiver responsibilities on adult children and spouses (especially daughters, daughters-in-law, and wives) (Boggatz and Dassen 2005). A child's or spouse's provision of goods, money, or services may persist even after the older recipient can no longer reciprocate (Call *et al.* 1999). The exchange also can be centered on the emotional rewards of providing care, the close affective ties between the caregiver and the recipient, or a belief in the religious rewards of family caregiving. For all of these reasons, adult children and spouses may be more willing to tolerate the felt burden of caring for a frail relative. In fact, three cases and five controls expressed the belief that institutionalization is appropriate for older people who have no children or whose children live far away. One control explained that caring for an older relative should be limited to adult offspring for many of the reasons of obligation and greater tolerance described above.

> [Long-term care is f]or...those who have no one to take care of them, for example, if all his sons and daughters are traveling abroad. Here only his own sons and daughters, not his nephew or his niece should care...his own sons...are the only people who could bear the situation. (48-year-old woman caring for father at home)

By contrast, relatives other than the child or spouse may have a weaker history of exchange with the frail older relative and follow more tenuous rules of obligation to provide care.

Certain characteristics of a caregiver's siblings, such as their number, gender, and geographic proximity, also may influence the caregiver's decisions about how to provide care. As the gender composition of the sample corroborates (Table 1), women tend more often to be the daily caregivers of frail older adults (Rugh 1981). Thus, control caregivers with many sisters may be more able to manage the other demands in their lives because their siblings are more likely to assist with hands-on care.

> The daughters should be the main source of care for the old. Unfortunately, I have no sisters and that's why I put her in a hospital. (66-year-old son who cared for deceased mother in Department)

As shown in the quantitative data, cases and their immediate siblings tend to live farther apart, which may have precluded some sharing of care, and thus motivated cases to institutionalize their older relative.

> I am holding the responsibility on behalf of my sister and my brother who are living abroad. I wish...her four children could visit her weekly, but we are only two here in Egypt. (55-year-old woman caring for mother in Department)

The perceived poorer physical and mental health of older relatives was a third difference between case and controls in the quantitative data, and the qualitative data similarly reflected this difference. Dementia and other degenerative mental handicaps were difficult for some caregivers to accommodate, with cases complaining of their relatives' "nervous" or aggressive behavior, confusion, wakefulness, and wandering. The burden of caring for relatives with mental deterioration was the main reason for institutionalization for 28% of cases.

> His life was endangered in some of the activities or behaviors he did, for example, he would use the oven in an irrational way...Also, he started going away to the street and losing his way back. (52-year-old woman who institutionalized her deceased father)

Major events associated with declines in mental or physical health also sometimes triggered changes in strategies of care.

> [W]e started to think about a hospital. But we didn't take the decision until one day he developed this semi-coma...(39-year-old woman caring for father in Department)

Five cases admitted their relative into long-term care after an acute medical emergency. The emergency and the necessary after-care led these cases to realize that they were no longer sufficiently capable in terms of technical training to care for their relative's needs.

The regular treatment and specialized care that some chronic conditions require also led 83% cases to view the professional medical staff and 24-h care in the Department as major benefits of long-term care.

> I think what we chose—to leave her in this hospital—is the best thing for care because everyday there is a problem, a medical problem, and for emergency...If anything happens when we are in our work, who will take care of her?...That was our problem. (55-year-old man caring for mother in Department)

In addition, 83% of cases expressed that their own care-giving skills were inadequate, especially when compared to the care that a professional staff could provide.

> ...Suppose there was no one with me, I cannot carry him from the bed to the toilet. It was difficult for me and he may fall too...I cannot manage it alone so there was no way out except long-term care. (74-year-old woman caring for husband in Department)

Adaptive strategies: new ideals

Another observation that emerged from this study was the way in which cases justified their care-giving strategies. Some cases expressed the need for freedom from the obligation of hands-on care. This change does not reflect a rejection of customary obligations, but an adaptive response to the changing circumstances of family life.

Competing demands and freedom from burden: Half of case caregivers described competing demands on their time, and on the time of their siblings, both of which limited the ability to provide customary kinds of care.

> My brother thinks that the hospital is a very good choice because everyone of us has something to do. We couldn't help [my father] or help my mother because my brother has his work and has his family also and I have my family which takes all my time. (39-year-old woman caring for father in Department)

Five cases were unwilling or unable to forego other responsibilities to care for their frail older relative at home. These cases justified their choice of long-term care by failing to see alternatives in a context of competing demands. Three cases even expressed feelings of freedom after deciding to institutionalize their relative.

> [Long-term care] is good because I felt free. I have my own business...I have many things to do outside. When she was staying in the flat above me...I couldn't leave home. (46-year-old woman caring for mother-in-law in Department)

Changes in family economics and power: In addition to competing demands on individuals' time, the confined space associated with urban living may prevent families from bringing older relatives into their homes.

> ...we started to think about taking our mother in our house, but...most of our houses have no extra space and circumstances are not suitable. My house, for example, is small. (55-year-old woman helping to care for mother in her own sister's home)

When intergenerational coresidence becomes logistically infeasible, families turn to other kinds of support. To attain or maintain higher social status in a time of increasing prices, some middle- and upper-class populations, from which the study sample was drawn, work more hours and/or migrate to places where they can earn higher wages (Omran and Roudi 1993). Forty-six percent of informants believed that this focus on income has fostered emotional and physical separation in families.

> ...[T]he family, it is breaking down...because there are many, many pressures...First is income. Young kids have to run out of the house to make money. Guys must stay up all hours to make money. Relations don't see each other as they used to. (51-year-old woman caring for father in long-term care)

Other changes include individualized wages and higher education (Rugh 1984; Yount 2005b), which may be associated with changing ideals about extended coresidence and intergenerational relations. Although norms of obligation among kin remain strong, they are evolving to fit a setting that has changed markedly in the last 30 years (Nawar *et al.* 1994).

Increasing rates of women's work and shifting family power: Another change has been women's movement into the formal work place. From 1990 to 2003, the labor force

participation rate for women aged 15 to 64 years increased from 32% to 39% (World Bank 2005). Women's participation in informal work also has been substantial (Hoodfar 1997). These trends have important implications for home-based care of older adults because women typically have been their primary care providers. Seven informants expressed the belief that work keeps women from their roles of "collecting family" and of maintaining collectivist family ideals.

> ...The work of women coming is not a good thing. Whatever, I'm working, but women collect people, collect families. But when she works she is never free. She wants her family to be only a small family. (50-year-old woman caring for mother at home)

Moreover, women's autonomy and say in family decisions has been higher in urban settings, and among the better educated and working women (Nawar *et al.* 1994; Yount 2005b). As women become more educated contributors to the family's income, they may have more say about the care of their husbands' parents.

> Before [the daughter-in-law] had no choice, because if she didn't [care for her in-laws] her husband would get angry and she would lose her husband. But now,...He is married to a woman who works and gives him money so he doesn't want to lose her or get her angry. (40-year-old woman who cared for her now deceased mother at home)

Adaptive strategies: reinterpretation of existing norms

Redefining "care": Although the ideals of freedom and individualism motivated some case caregivers to choose long term care, other cases continued to view the care of elders as a "duty." These cases did not choose long-term care for personal interests, but viewed it as the best way to meet their older relative's needs, and thus to meet their "collectivist" obligations of kin care. These cases thus redefined acceptable forms of care to include institutionalization.

> ... [I]n Eastern countries, people...regard this act as a kind of neglect and lack of respect for old people...[but] We are educated and not ignorant people. This hospital has specialized people to care for old people and whatever I do for my mother, this place would be better...I care about...my mother's interest. (55-year-old woman whose mother was a resident of the Department)

For these cases, "care" included specialized formal care as well as home-based informal care, and institutionalization did not constitute neglect.

Using widely held values to defend new behavior: To justify further these new choices of care, cases also used widely held beliefs about obligations among kin, the need to reciprocate prior care, and proper expressions of religious conviction. Thirteen cases also saw formal long-term care and more conventional forms of home-based care as synergistic ways to meet these expectations. First, ten cases discussed the importance of fulfilling obligations to family, and especially to parents, who need extra care.

> I think caring is a prior duty that should be fulfilled regardless of other duties or responsibilities of life and children. This is a sacred duty children should do towards their parents. (66-year-old son who cared for deceased mother in Department)

Four controls expressed the opinion that institutionalization constituted neglect of these duties, but cases believed that long-term geriatric care was a way to meet these obligations. Fourteen cases also maintained high levels of support for their frail older relative, visiting daily or several times a week, countering the impression that older adults were put into long-term care to be neglected or forgotten.

> [I come] everyday to...speak to her, to try to know everything about the day. I ask the nurses...about everything. (55-year-old man caring for mother in Department)

Even the cases who institutionalized their relative because of a need for personal freedom maintained frequent contact and support. These observations suggest that cases were adapting to new circumstances, rather than rejecting their customary duty to care for older relatives.

Second, four cases saw institutionalization as a legitimate way to reciprocate the care that they had received as children.

> All of [the children] should share the responsibility because their mother or father have brought them all up...She must feel that there is a reward for her toil all the past years. This is the least we should do. (48-year-old woman caring for mother in Department)

Finally, almost every case and control discussed the influence of religious beliefs on decisions to care for their older relatives. Lay understandings of Qur'anic text often included the views that caring for older parents earns a heavenly reward.

> God number one, parents number two. You should take very good care and you will be punished if you leave your parents. (47-year-old man caring for mother in Department)

Although two controls expressed the belief that geriatric institutions contradict religious teachings and Egyptian traditions, one case described the Department as a place that is blessed by God because it caters to the care and provision of older people.

> If those people follow our Islamic teachings...they will treat their relatives well. God will regard this good treatment with rewards...in the hospital you are doing great work and God will reward you later. (48-year-old woman caring for mother in Department)

Discussion

This paper has explored the factors that lead family caregivers to place their frail older relatives into long-term care in a resource-poor setting where "total family care" is the norm and institutional care is limited (Nandakumar *et al.* 1998). Exploring the decision to use long-term care is important to understand how families adapt their caregiving strategies to the changing circumstances of family life in a social context that has changed dramatically over the past 30 years (Nawar *et al.* 1994). Because few formal long-term care centers exist in Egypt, this study exposes an emerging social trend that has multiple implications for the allocation of public resources.

Findings suggest that cases and controls differ in three important ways that may have affected their use of formal and informal care. First, almost all of the controls were children or spouses of older relatives, compared to two thirds of the cases. This difference is consistent with heightened expectations of care associated with the roles of "child" and "spouse." Second, controls had a larger number of "immediate siblings" (as previously defined), and more often lived in close proximity to these siblings. Siblings provide a vital

network of support not only for the older adult, but also for the primary caregiver (Checkovich and Stern 2002). Having larger and more accessible informal networks may have alleviated the perceived burden of caregiving and may have enabled many controls to manage their duties of care with their other responsibilities. Third, cases more often reported that their older relatives had worse physical health and more severe cognitive impairment. Acute declines in physical health and events related to mental decline usually triggered the decision to place a frail older adult into long-term care. In most cases, family caregivers felt under-skilled or otherwise unable to cope with the medical and supervisory needs of the frail older relative.

A second major finding from this study is that some caregivers in Cairo are adapting their caregiving strategies to fit the social and economic circumstances of daily life. Some major societal shifts include increased rates of migration, urbanization, and participation of women in the workforce, as well as perceived changes in the economic environment that include an increased cost of living and a heightened desire for material goods (Omran and Roudi 1993). Women, often the daily caregiver of older adults (Rugh 1981), are achieving higher levels of education and are marrying at later ages, resulting in adjustments to their gender roles, relative power in the family, and availability and willingness to provide care (Nawar *et al.* 1994; Yount 2005b). Such changes in the social structure in Cairo have led some cases to consider non-normative forms of care for frail older relatives. In particular, some families are redefining the terms of intergenerational exchange by combining long-term care with customary forms of support. In the case of institutionalization, most family caregivers maintained frequent and substantial contact with their institutionalized relatives. The finding that cases and controls purportedly were meeting their customary obligations while acting in distinctly different ways underscores the adaptability of intergenerational exchange even in a highly collectivist society. Families incorporate these adaptive strategies into existing exchange relationships in order to meet their customary obligations among kin. In this way, notions of familial duty—or *wagib*—are resilient to the changing circumstances of family life in Cairo.

A third major finding of this analysis is that case caregivers justified their decision to place older relatives into long-term care in two ways. By describing their decision in terms of time constraints and family changes, one group of caregivers attributed their decision to competing demands on their time and to the primacy of personal needs. Changes in the societal context may have affected what this group values, motivating these family caregivers to institutionalize their frail older relatives. Another group of caregivers held fast to ideals of collectivism and family duty, and saw institutionalization of older relatives as a new way of meeting customary obligations of care. Obligations among kin, reciprocation for past care, and religious values dictating care of older relatives were the widely held beliefs that these cases used to justify their care-giving decisions. These cases felt they were meeting their customary obligations by providing professional, high-quality care that surpassed the care that could be provided at home. Notably, the ideals and behaviors of these two groups of cases were not mutually exclusive. Some common ideals, and the universal maintenance of intensive informal care, suggest that certain strategies of care may be shared.

Certain limitations of this study merit mention and suggest avenues for future research. First, the cases and controls in this sample were highly motivated caregivers, and so their attitudes and behaviors may not reflect those of the general population in Cairo. Cases, for example, had found a long-term care center that is not publicly advertised, and over half of the controls had sought and had received home-based care from the Department's director. Missing from the sample are the caregivers of older adults from lower socioeconomic strata,

those who care for non-coresident older relatives, those who do not seek formal care for their relatives, and those whose older relatives live in geriatric homes not based in hospitals. Additional research on these other populations would broaden our understanding of the living conditions and well-being of frail older adults in this setting. A second limitation of the study is that, although cases' reports about the health status of their older relatives corroborated Departmental medical records, controls' reports about the health of their older relatives were not similarly confirmed.

Despite its limitations, this study has exposed a range of idealized and actual strategies to care for frail older adults in a highly collectivist society. In so doing, this study raises important questions about the pervasiveness of these ideals and strategies in the broader Egyptian population. Raising such questions hopefully will motivate new, multigenerational research in Egypt that includes community-dwelling and institutionalized older adults. Another fruitful avenue of research would be a focused investigation of the full range of adaptive strategies among families who care for their frail older relatives at home in a context of social change.

A persistent lack of geriatric services and research on older Egyptians also suggests that policy makers continue to overlook the implications for families of population aging in this setting. This research on formal geriatric services and elder care in Cairo thus addresses an important gap in research, policy, and the provision of services in this setting. Its findings warrant testing in representative samples, and expose a likely need for resources to improve the quality of life of older adults and their caregivers.

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